

432 MHz AND ABOVE EME NEWS

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432 AND ABOVE PHOTOGALLERIES

CONDITIONS

have the worst type of news to report this month. Good friend and active EMEer, VE3CRU has passed away after a valiant fight with cancer. Hans was very close to completing WAS on 70 cm when his was afflicted. He had hoped to complete this challenge, but time was too short for him. We will all miss his enthusiasm and friendly helping hand. There is not a lot to report this month. Except for activity by HG100BAY on 1296, the bands were rather quite. If fact there was probably more activity on the post SW than the SW. In Aug we have the EME2000 Conference in Rio. I am looking forward to meeting with many of you there. By Sept, if not already, thoughts will be focuses on the ARRL EME Contest, which comes early this year.

EME2000

It is now Aug and time to head for Rio! Don needs to make a final roll call of everyone who is attending the conference. No matter where you are staying (at the conference hotel or not), Don needs to hear from you, if you have not previously confirmed attendance. Please be so kind as to co-operate and reply by return e-mail:

[EM 2000 Confirmation](#)

or fax +55-41-341-1335. He needs your input!

OX2K DXPEDITION REPORT

Last month we ran the logs of OX2K for 70 and 23. This month we have OX2K's official report -- During the period from 29 May to 4 June the OX2K dxpedition activated Greenland on HF, 50, 144, 432 and 1296 MHz. On the last 3 bands we had to revert to EME to make contacts from this remote location. Sondre Stromfjord, or Kangerlussuaq in Greenlandic, is located at the end of a 140 km long fjord just north of the polar circle. The favourable weather conditions have made it the main hub for both internal and external air traffic to Greenland with regular direct connections to Denmark, Iceland, and Canada. The airstrip was built by the US during World War II and served as a refuelling stop for planes going between NA and Eur. During the cold war Sondre Stromfjord hosted a military base, submarine communications site and a relay station for the US missile radar surveillance. The surrounding mountains were thus filled with

radio installations, most of which were abandoned in 1991/92, meaning that masts, cables, power generators and huts were available with only minor modifications. With the help of Holger, OX3HI, we gained access to a site a few kilometres south of the community on Black Ridge. It took Holger, together with Per, OX3DU, and Michael, OX3LG, nearly all winter to remove the old equipment, clean the radio hut and make new 208 Vac installations. From this location we worked HF, 50, 144 and 432. This hut now serves as the club station for Sondre Stromfjord. Today Sondre Stromfjord has a population of 400 most of who work at the airport and the associated facilities. The entire community is literally build along both sides of the airstrip and the town center is within 100 m of the terminal building. There is only ONE shop in Sondre Stromfjord, which while we were there was running low on stock. The ice in the fjord makes it possible to access the harbour for only approximately 3 months between June to September. To the east there is a 25 km gravel road leading to the inland ice. There is a currently a lot of activity here as Volkswagen is building a car test track of over 100 km on the ice. This road is also the entry/exit point for expeditions crossing the inland ice to the east coast. On the way to the ice you can see remains of an old US jet fighter plane that crashed in the 50's and is well preserved due to the very dry continental climate. To the west, a 13 km road from Sondre Stromfjord to the harbour is the longest paved road in Greenland. A further 3 km by gravel road takes you to Kellyville, a tiny community with a population of 9 people. 2 km further on is the abandoned site of the submarine communications installation. All that is left is the generator/transmitter hut. >From this location you have a clear view to the inland ice more than 40 km away. It is almost impossible to determine how far away things are because there are no known references such as houses, cars, buildings etc. You can also see the mountains surrounding Sisimiut on the coast an amazing 140 km away, demonstrating the dryness of the air and lack of modern pollution.

Kellyville is maintained and run by Stanford Research Institute. The 32 m dish located there is normally used for incoherent scatter radar studies of the ionosphere. It has an estimated gain of 49 dBi, equal to a beamwidth of approximately 0.5 degs. All transmitter equipment is made for low duty cycle pulse transmission and not suited for amateur radio service. On the evening of our arrival we went to Kellyville to look at the installation and talked to the site manager, John, to get an overview of how we should hook up to the system. We wanted to use the system with as few changes as possible to quickly get on the air. Due to limited pre-information on the system and a note from Gudmund, SM2BYA, regarding the polarisation, we were very concerned about how it would work out. The transmitter for the ionosphere scientific studies is a 3 MW, 1291 MHz pulse klystron amplifier connected to a waveguide that runs some 100 m to the feedpoint/polariser. We gained access to the waveguide at the klystron output and inserted a coax-waveguide transition for our TX-signal. From a

distance the 32 m dish looks nothing special, but standing on the 18 m high pedestal gives a whole new perspective of its actual size – it is BIG. The RX-port of the polariser ends in an insulated cylindrical 'chamber' between the 2 elevation gears. (The chamber is big enough for 4 people!). The RX-port is a waveguide-coax transition, so all we had to do was mount our pre-amp and optionally use a relay to provide additional TX isolation. We measured the isolation between TX and RX-port on the polariser to approximately 30 dB, so we needed the isolation relay. For RX we used the existing 1290 MHz-28 MHz down converter at the feed point. The LO frequency is controlled from a signal generator inside the building. The LO frequency is divided by 3. In normal operation, the LO is on the high side, so the signal is inverted. We programmed the LO to place 1296 at 28 MHz with the LO on the low side. We used an FT-1000MP. Its dual receiver capability allowed us to monitor for others while simultaneously working calling stations. The 28 MHz IF signal were carried to the building by existing RG-214 cable.

The following morning we returned with all our equipment, including 2 complete setups in case something failed or had become damaged or lost. The connection to the TX-port was only a few meters from our operation position in the transmitter/workshop building, and a short length of 1/2" LDF was used. The pre-amp and isolation relay was mounted and the relay was controlled from our sequencer via the existing control cables. After a final check to ensure that the relay and pre-amp was working, it was finally time to test the TX-line and listen for our own echoes. The tracking of the moon was done by computer controlled motors. We were thankfully not required to turn the dish manually. We performed a TX and SWR check, then aimed the dish at the moon. All of us were anxious to see if our system was working. We transmitted some dashes, switched to receive and instantly heard our own echoes with S5-7, YES it worked. It was just in time for the Eur moonset. We immediately called CQ and soon the 1st station was in the log. We were very relieved and happy to confirm that the dish polarisation was in accordance with the amateur convention! There were some minor oscillations in the auto-tracking system, which made the dish scan the moon with +/- a few tenths of a degree, enough to cause some QSB. Normally the dish is used to track fixed objects/positions in the sky. Tracking the moon meant that the computer had to do some extra calculations, which took more time, causing the system to become a little unstable. This problem was fixed by John the next day. We'd always had good strong echoes, but in a QSO with Stig, OZ4MM, he told us that our signal had changed dramatically from the time at our moonrise and some 5 hours later. We now realised that there was an offset problem, which John confirmed and he told us that they had an earlier suspicion to an offset error. We could easily enter offset corrections into the tracking computer, but it was an educated guess as to where to start. The dish would frustratingly return to the park position (Az=0°, El=90°) to begin a new event

every time we changed something. After some time (days!) we had the offset routine optimised. The best way was to turn the dish to a point where the echoes would just disappear on either side of the moon for both azimuth and elevation and then simply aim for the centre point in both axes. We could hear our own echoes with 1W, but could not easily reduce the power further to find the limit. The moon-noise was quite evident, which is uncommon on 23 cm. In our preparation we had calculated to be able to work stations having 20 dBi antenna gain and 100 W, so we were especially alert during Eur moon set and NA moon rise. I don't think we actually worked any non-EME stations, but the best effort in real weak signal stuff was our "QRZ PA3..." to PA3DZL calling and 'testing' with only 10 W and a 2.5 m dish. To keep track of common moon windows, we used the VK3UM EME planner. Our common windows with JA and VK were limited because the dish could not operate/track below 10° el. The limitation was implemented to avoid any inadvertent hazardous radiation when operating at a 3 MW level. Our plan was to use 4 yagi systems on 2 m and 70 cm, which would give us reasonable antenna gain allowing us to work a fair number of stations while keeping the mechanical effort to a minimum. The antennas were placed approximately 30 m apart on opposite sides of the radio shack. The 70 cm antennas (4 x 28 el 432-9WL) were mounted on the "scaffold" and the 2m antennas on a wooden post. Both systems were connected by 1 5/8" LDF for the major part of the TX-line, which limited the loss considerably. Both systems were mounted in a H-frame with an azimuth/elevation rotator, G-5600. It had been our original plan to pre-assemble the H-frames and antennas and to test them thoroughly before everything was shipped to Greenland, however due to lack of time this was not accomplished. Unfortunately, as feared, we encountered problems when mounting the antennas. The G-5600 azimuth/elevation rotator was simply too small for an EME antenna and could not elevate the system without the antennas being fully balanced. On 70 cm we managed to mount all 4 yagis, and with the help of small counter weights consisting of small bags filled with gravel, the system was able to elevate. After several tries on 2 m we had to settle for only 2 yagis, as it was better to be QRV with only 2 yagis than QRT with a broken rotator. Our amplifiers were a 4CX1500 on 2 m and a 2 x 3CX800 on 70 cm. Both were build by Michael, OZ2ELA/OX3LG. By Tuesday evening everything was ready, with all the equipment installed and the antennas beam heading calibrated. Sun noise was quite strong and we could even hear thermal noise from the ground so we were keen to get started, but of course we had to wait for moonrise on Wednesday morning. Finally we had moon rise, but for the 1st 20 mins the surrounding mountains and inland ice were obstructing the path. Only after 5 degs el was reached were the 1st signals heard. On 70 cm we soon heard our own echoes, but on 2 m it was harder with the smaller system. The 1st QSO on 70 cm with DL9KR was run by Michael, OX3LG, with Bo, OX3LX, eagerly watching. Bo then took over while Michael recovered from being the 1st ever to work a 70 cm QSO outside of Greenland. To avoid any interference

between 2 m and 70 cm, we had to synchronise the TX and RX periods. We chose to use 2 min periods normally used on 2 m. All skeds were 30 min where OX2K would transmit in the 1st period. It was quickly evident that this was not a good solution however, as instead of 2 min periods, suddenly a 4 min period was present at every full and half-hour! This produced great confusion. We used split frequency operation transmitting on 144.085/432.085, in sked listing on 090 and random 080-085. The majority of people calling us on random used 085, which caused a lot of QRM, especially when the timing sequence went wrong. It took some time before the systems were running correctly and on Wednesday we finely adjusted the beam heading to make sure we hit the moon. The poor readout on the control units for the Az/El rotators did not make things any easier. Unfortunately one of the control cables for the 2m system was damaged and we lost a couple of skeds on Wednesday before the fault was corrected. On Thursday the input circuit in the 2m PA suddenly failed. This unit was finished literally hours before it was due to be shipped and had been tested for only a limited time with a dummy load. However Michael "the wizard" fixed the input circuit and we were quickly back on the air, without having to setup the spare PA. Unfortunately some innocent HAM's suffered from this incident and they could not understand what had happened. Despite the limited system on 2m we succeeded with many of the skeds and also some random QSOs. The best signals were obtained every morning, when the moon rose over the inland ice with 5-15 degrees elevation. Ground gain must have been a factor with the gently sloping ground for the 1st few km to the east. A good tool to find stations and aim antennas was a DSP FFT program (FFTDSP 4.2) where we could "see" even very weak signals in the LF bandpass. It was the first time any of us had seriously used such a program and it will definitely not be the last!

When all the OX2K stations were up and running we activated 2 HF setups, a 50 MHz setup, a 2 m setup, a 70 cm setup and the 23 cm at Kellyville. Consequently due to lack of operators, it was difficult to keep all the stations running, which meant that some EME-operators had to do 20 hours shifts. This was far from ideal, especially for the operators, but the result was reasonably good. Sometimes the 2 m EME operator was assisted by a non-CW/EME operator to press a button on the memory-keyer or to "look" for signals using the FFTDSP program. In retrospect it is fair to say that the expedition was a huge success. The results were on 2 m were 36 QSOs, 36 initials, 15 dxcc (12 OX firsts) and 3 continents, on 70 cm: 39 QSOs, 35 initials, 15 dxcc (all firsts) and 4 continents, and on 23 cm 113 QSOs (22 on SSB), 76 initials, 20 dxcc (all firsts) and WAC. We worked HB9Q, SM2CEW and WA4NJP on all 3 bands! Given the remote location, the limited amount of equipment and the fact that we managed to work EME on 3 bands simultaneously, the result has to be rated as VERY good. For all of us this was probably the greatest experience we've ever had as radio amateurs, and most of us are already thinking where we should go next.

For more info see the **OX2K** homepage:

[**OX2 Home Page**](#)

and general information on Greenland:

[**Greenland Info**](#)

Our sincere thanks to the site maintenance crew at Kellyville and especially John Jorgensen for all his help, Dansk Mikrobølge Teknik for the SSB-electronic Low Noise Amplifiers, Northern Lights Software Associates, NLSA, for Nova for Windows, AF9Y for FFTDSP 4.2, and Force 12 for 4 x 20 el 144MHz yagis.

[**AL7OB**](#)

Mike does not report much activity in July but has made terrific progress on his dish -- The big 3500 pound steel AZ/EL mount is on a trailer in my back yard and almost ready to start assembly of the steel angle. The pilings are in place. I ended up with 3 8" schedule 40 casings, driven to 18' deep with 12' out of the ground. I plan to construct the dish on top of my trailer. Pictures and more details are on my website:

[**AL7OB WEB site**](#)

I finally put a sun noise plot of my 432 antenna pattern on the page with some notes. I welcome any comments. Erich, OE9ERC and Werner, OE9WRS, visited as planned on 28 July. I hope they enjoyed Alaska.

[**DJ5MN**](#)

Bernhard writes -- I have not been too active the last few months on EME. But during the July post SW I worked some good old friends via the moon. QSO'd on 1296 were ZS6AXT, W2UHI, K3AX, G4CCH, IK2MMB, HB9BBB and K5JL. Signals were generally good. I would like some 23 cm skeds for the next SW. On 23 cm I am still running 3 m dish with an TH327 PA at full output.

[**DL1YMK**](#)

Michael is still looking for EME Dxpedition ideas , but is also working on his home system -- I'm busily working on 23 cm EME with a 12' dish. OE5JFL gave me a helping hand with his stand-alone tracking controller, and after some problems I adopted it to an EGIS 2-axis rotator. It's working fine now. I only have to add end/stop switches for security. I had hoped to take advantage of the summer weather to get everything installed, but it is no fun, when it rains continuously. This year, summer did not take place in this part of the world, hi. [WX has been similar in NE NA.] I will try to be on for the ARRL contest with low power (100 W).

GM0ONN

Iain writes, I am just back from a business trip to Singapore where I had an absolute ball. Nice cheap tax-free radio shopping. Let me know if anyone needs info on this place as I now have some good contacts. I am and am going on holiday for a few weeks. When I get back I will continue work on my systems for 23 and 3 cm. On 3 cm I am measuring 11 dB of sun noise with a 1.8 m dish. I have 10 W TWTA. I have a 40 W TWT available, but it needs a PSU. I will probably try some RX tests 1st. GM4ISM has 40 W TWTA up and running. He just needs a feed for his 2.4 m dish. He has already made some EME QSOs. I am also trying to generate interest into a large Scottish 70 cm EME party for Oct/Nov. Hopefully we can bring GM4TXX out of retirement... I hope to get GM4ISM, GM3WOJ and GM4ILS involved. We should be able to muster up 8 x 21 el yagis and a 2 x 3CX800A7 PA. Otherwise we can always use a 4 x 21 el yagi array and the old 2 x 3CX400 PA. I will let you know of any progress.

GM4ISM

Mark's EME plans are a "bit" on hold -- Work is as usual getting in the way of the hobby. My VE4MA feed is now 50% complete and a NF measuring system 95% done. But I have a new job starting 21 August that will take me away from home for 6 to 9 months. I will have most weekends at home, but with travelling time and family commitments, I will not be able to do much operating. The bright side is that I will have workshop facilities in the evenings and my construction may well increase. I will attempt to be QRV with an improved system at least for the EME contest in the autumn.

HB9BBB

Dominique reports that his son, Lukas, has added 1296 EME sound files for CT1DMK, G4CCH, HB9Q, HGIOOBAY, K3AX and OX2K to his homepage at <http://www.hb9bbd.ch>. In July he QSO'd HG100BY and others in about 4 hours of operating. Dominique adds "Hopes to see you all in Rio!"

HB9Q

Dan (JN47cg) writes -- We did not work any new station last month, but we spent a lot of time working on our systems and testing for echoes. There is still a lot to do, but some progress was achieved on 432 and 1296. We plan to run on 144 with 8x19 yagis at the same time as 432 and 1296 on the 50' dish. Does anyone have information on where to get Thompson TH 290 or TH 390 tubes (for a reasonable cost)? We will be QRV during the ARRL EME contest on random. Our activity (times and frequencies) will be announced in the Sept NL, on MOON-NET and on our home-page at:

[HB9Q's Home Page](#)

HG100BAY

Csaba, HA5BGL reports on the results of the Bay Memorial Station activity on 1296. They QSO'd on 22 July at 0526 OZ4MM (559/439) and 0630 K2UYH (449/559), on 23 July at 0016 EA3UM (O/O), 0302 OE9ERC (579/559), 0515 ON5RR (M/449), 0603 KD4LT (569/O), 0732 K2DH (O/339), 0743 OE9XXI (579/549), 0749 OE9ERC (579/549), 0756 G3LTF (559/439) and 0808 OZ4MM (569/449), on 29 July at 0608 DJ9YW (549/449), 0636 G4CCH (569/549), 0736 F5PAU (569/559), 0849 OK1KIR (M/O), 0858 VE1ALQ (559/559), 0913 ZS6AXT (M/O), 1051 LX1DB (579/569), 1240 W2UHI (569/449), 1300 W5LUA (559/449), 1313 W6HD (569/549) and 1326 N2IQU (569/549), and on 30 July at 0800 OH2DG (O/449), 1242 CT1DMK (O/O), 1314 HB9BBD (579/549), 1327 K5JL (579/559), 1354 W5ORH (569/559) and 1512 W7SZ (M/O). QSLs should be sent to: Radioklub - HA5KHC, 1476 Budapest, P.O. Box: 166, Hungary. [No activity was reported for 432 (or 144).]

1STDJ

Piero found EME conditions on 432 MHz rather poor -- During the SW the band was empty. I ran skeds with K4AR and W2WD. No signals were copied at both ends. I have been looking for HG100BAY, but no luck. They have been reported to be QRV on 1296. [There was no report of activity on 70 cm – see above.] Earlier in July I worked RW1AW for initial #118 on 432. I also had a very enjoyable visit with W1JR when Joe was Eur.

IK2MMB

Sergio missed the 23 July SW due to business trip, but was active on 23 cm at other times -- During the month, I QSO'd on random with G4CCH, DJ5MN, W2UHI and K5JL. Quite a event was a QSO between PA3DZL and myself on 2 July considering that a 2.5 m dish and about 125 W at feed were used by Jac. I had my usual 3.5 m dish and 520 w. The 1st sked was negative in the morning, but a 2nd sked in the afternoon was surprisingly good. Moreover exactly at sked time a deep fading was present. Reports were (O/O) on both sides and all information were copied. I received twice his full callsign (529). I discovered an overheating problem with the preamp box on my IMU feed due to the warm season's Sun. During daytime activity RX performance depending on Sun angle may go down. I plan to find a solution in the future. At moment of this writing I am waiting to become a father. This will be my 2nd child... another boy, that's good because I need somebody to work on the dish for me....Hi!

ON5FF

Derk is moving to the South of France. he has already brought a lot of equipment there. His 8 x 12 lambda yagi is down. He has to do some mechanical work on the array, but plans to reassemble it in France. Derk also still hopes to go to 3A. He will live in the south and have his kids go to French school, but travel to Belgium for work.

OZ4MM

Stig also found going slow during the July SW – On Saturday at 0400 I worked OH2DG (429/O) on 13 cm. This was Eino's initial QSO on 2300 and my initial #33. I then switched to 23 cm and found activity as low as it could be. I only worked at 0526 HG100BAY (439/559), 0641 DF4PV (449/569) and 0650 K2UYH (56/55) on SSB. On Sunday activity seemed more normal. I QSO'd at 0648 OE9ERC (579/579), 0653 ON5RR (549/559), 0740 W1QC (559/579), 0750 W2UHI (569/569), 0758 K2DH (569/569), 0807 HG100BAY (439/569), 0816 F5PAU (579/579), 0821 G3LTF (559/569) and 0826 K3AX (549/559). I will be back on for the Aug activity weekend.

PA3DZL

Jac was away on holiday much of July and thus not too active -- I worked on 1296 on 26 June SM2CEW (O/O) for initial #11, and on 2 July IK2MMB (O/O) - #12 very nice signals (peaking 529). Sergio is the smallest station I have worked up to now. Signals were very nice so even smaller dish stations are possible for me. I will switch to new 7/8" cable soon, which should give me about 150 W at the feed. This is only 0.6 dB more, but for EME it is quite a lot, hi.

VE1ALQ

Darrell writes that he caught HG100BAY (559/559) on 23 cm on 29 July at 0905 - - I only had 15 degs of EL at the time, so the moon was partially hidden in the trees. In the summer months I need 25 degs to totally clear the trees on moonrise. If HG100BAY was only running a 3.1 m dish and 100 W, there is something the rest of us are NOT doing right, hi. [That's what they reported last month.]

W2WD

Warren writes – I was very sorry to get the sad news concerning VE3CRU. Ironically, I had just made my 1st EME QSO using the portable 20' dish with which I had hoped to provide Nebraska and Minnesota contacts for VE3CRU. My contact was with PA4FP, who was using 4 x 26 el, 8.5 wl BV yagis. This antenna is similar in size to that to be used by Hans. Although the signals from PA4FP were rather weak, he was running 1 kW and Hans was going to run 1.5 kW plus, so I thought we would have had a reasonable chance to make the contacts. I am having difficulty getting accurate azimuth settings with the manually operated tripod mount. I am still seriously thinking of making the NEB trip and hoping for clear WX for pointing the antenna. I am so sorry that I wasn't able to be ready in time for Hans. The xyl and myself have devoted many hours to the project... but fell short.

W2UHI

Frank reports that 23 cm band conditions were not good during the SW, but he managed to work several stations including DF4PV, G3LTF, OE9ERC, K2DH, W1QC, ON5RR, OZ4MM and F5PUA. Conditions were better the following

weekend when he QSO'd DJ5MN, HG100BAY, K3AX, W6HD, and ZS6AXT.

WA8WZG

Tom is temporarily QRT due to Storm damage. Actually his EME system is basically operational, but he needs a few weeks off to rebuild. To see what Mother Nature can do, take a look at Tom's WEB page at:

[WA8WZG's Home Page](#)

WD5AGO

Tommy missed the July SW and will be temporarily QRT due to neck surgery. Tommy plans to be available for Aug SW skeds. He reports his new 4 m system seems to be working well. Echo's are not as loud as with the 5.5 m dish, but are there nearly all the time as compared to the 3 m dish. I have been working on new high IP3 LNAs for 2 m and 70 cm. Preliminary results look very good results. Boards will be available soon. I still have the 23 cm LNA boards.

ZS6AXT

Ivo missed the July SW, but was on for the post SW -- I am back from Eur. I missed the last SW, but was on last weekend. I brought with me virtually all I needed for 3 cm EME. The only outstanding item is now a dish, suitable for EME. I also bought a 40 W SSPA for 6 cm, so I will have a better signal there. Now I just need to build and install all of the above, and hope to add another band to my score, plus a few more stations on 6 cm. On Saturday 29 July I worked on 23 cm HG100BAY (O/M), G4CCH, DJ5MN and W2UHI. I also heard VE1ALQ. On Sunday 30 July I worked HB9BBD and heard DJ5MN, HG100BAY and W2UHI. My Eur visit was very nice. In OE and DL, I met with old EME friends. Thanks to Erich (and Regina) for their hospitality. I am looking for a good design for a 3 cm LNA. I hope that we will again have a microwave EME Contest this year.

K2UYH

I did not help July SW activity much as my operating time was limited to Saturday morning (22 July) because of a family trip. I tried to arrange some 70 cm sked activity via the internet, but had not find any takers, and so stayed on 1296. I was surprised by the low turn out there. I did QSO at 0628 HG100BAY (449/559), OZ4MM (55/45) on SSB and 0705 DF4PV (559/45) on one-way SSB. Gunter tried SSB and appeared to have sufficient signal strength, but I could not understand his SSB. No one else was heard. I did make some progress toward getting back on 3 cm EME. I located a Ku-band TVRO dish, and with the help of KB2AH and some other locals disassembled it and transported it to my QTH. We originally estimated the dish to be 12 to 14' in dia, but when we had a chance to measure it, we realized it was quite a bit larger – closer to 18'! Pictures of this operation can be found at KB2AH's webpage at:

[Pictures of Al's TVRO Dish](#)

NETNEWS

by

[G4RGK, DAVID DIBLEY](#)

G4RGK had no July moon activity, but did work OE3JPC and 9A2SB on Aurora on 432 at about 1600 km for a new dxcc.

KA0Y is just about QRV again. This time he has expanded his 40' dish to 15.24 m! He hopes to be active by the Aug SW, and can be reached at tel 319-648-5803 or at: [KA0Y](#)

EA3UM was QRV on 23 July and QSO'd at 0000 HA100BAY.

WW2R has now worked 7 people on 6 m that I he had previously QSO'd off the moon. Is this why 432 EME is so quiet?

K0YW's new dish is up. He has painted the mount and is working on the AZ drive. He is just about complete and hopes to be QRV very soon.

VE6TA still has the 23 cm feed in, but may also be on 222 in Aug. Grant reports that VE3AX is back on 222 looking for EME contacts.

VE4MA got a lot of rain in July and notes that precipitation is far above normal. Barry hopes to be QRV on 5.7 GHz in Aug.

K2DH has changed the if he uses on 23 cm. Dave is now using a TS-930.

RW1AW worked I5TDJ for initial #78 on 70 cm on 2 July.

W5ZN has been working on his microwave equipment.

W7SZ is now playing with DSP-10 filter and is having some success picking up echoes with only 3 W.

WA9FWD is still working on a GI7B (VE4MA style) 23 cm amp.

VE1ZJ is not presently QRV on 23 cm or 70cm EME. He expects to be back on in the fall. His antennas were badly damaged by the WX.

K6IBY's antennas are up with new phasing lines and just need to be calibrated. All is just about ready for EME on 70 cm again.

K5JL is disappointed by indications of low RIO 2000 attendance. Please, anyone not registered, there is still an opportunity to go to the conference.

K9BCT was surprised while echo testing on 23 to hear G4CCH. They went on to have a FB QSO.

K8UC is looking for 432 moon activity from EM99eg. He is using a 25' dish and 500 W.

KD4LT was not to much on EME in July, but did work HG100BAY on 23 cm.

K3AX worked 4 stations on 1296 in July and heard HG100BAY, but could not hook up. He did not catch IK2MMB either.

W5LUA worked HG100BAY and also gave K3AX a call, but there was another station on the same freq and they did not complete.

CT1DMK tried to get HG100BAY attention during the SW, but did not succeed. [They QSO'd the following weekend.]

DL9KR had problems in July. His antenna were damaged in a storm, and had a fire at the feedpoint. All is now repaired and working better than ever.

K6DV had a good time in Winnipeg. Back home the temps are high and there is fire nearby. He is working on a 23 cm PA.

N7EIJ is still not QRV on 70 cm. He has no antennas, but is still looking.

FOR SALE

UR4LL, Alex has **more Russian tubes and finals available**. For information and details see:

Russian Tubes for Finals

WD5AGO still has **23 cm LNA boards available**. He also has for sale some **fully assembled 23 cm LNA's and an extra 4 tube (2 x 2 7289s phased) water cooled 23 cm PA with metering and p/s (1300v at 1 A) all in a 6" x 19" rack (17" high)** All his horns and hybrids are gone. Contact Tommy at: [WD5AGO](#)

W1ZX has for sale an HP-415E SWR meter, an HP-431B power meter (with cable & head), 4 el cubical quad and GR-1216A IF amplifiers. Does anyone need an HP-432A? Willie has a source.

N7EIJ wants to sell 2 x 30LBX 70 cm yagis, both for \$US215 including shipping. He is looking for a PA.

VE1ALQ is looking for an M57745 output brick.

K3AX is looking for a HP-8555A plugin for parts to use in a 141T mainframe. Just a broken one will do, not one that is operational.

LA8LF wants for his EA8/LA8LF EME station an HP-432A without head/cable and manual. Must be reasonably priced. Contact Anders at e-mail: LA8LF.

FINAL

-- The job of skeds coordinator is key to generating EME activity, but one that seems to burn people out. Over the years we have been blessed with a continuing stream of great coordinators. This list starts with VE7BBG and includes W4WD, G3WDG, SM0PYP, K4PKY and K1RQG. Klaus, DL4EBY has been Skeds Coordinator for almost 8 years and has contributed greatly to the EME cause. His EME scheduling software improved the scheduling process by eliminating window problems and making the whole process much more efficient. Klaus now wants to step down as coordinator, and has asked me to find someone to take over his job. He plans to continue maintaining the EME Directory and has assured me that he will be around to assist the new Skeds Coordinator.

-- Time flies. Reminder if you are planning to attend the Microwave Update, the reduced rate reservations are due by the end of this month. See announcement in last month's NL or the WEB at:

Microwave Update

-- The NL needs more technical material, please if you have any ideas, technical hints, etc. please send them in! Keep the reports coming too.

-- I will be away at the EME2000 Conference in Rio and be retuning on 26 Aug and if possible will try to be on for Aug SW on Sunday. I hope to see many of you in Rio. Please keep the reports and technical info coming.



AUG EME SKES**26 AUG****Time 432.040**

1030z K6IBY -DK3WG
1130z N7LQ -DK3WG
1200z K6JEY -DK3WG

27 AUG**Time 1296.050**

0930z DL6YDH-DJ5MN
1000z G4RGK -DJ5MN
1030z K9ZZH -DJ5MN
1100z WA9FWD-DJ5MN
1130z KD5FZX-DJ5MN
1200z G4DZU -DJ5MN
1230z W4AD -DJ5MN

[**Learn about the upcoming EME Symposium.**](#)

[**Most recent Schedules from Klaus, DL4EBY**](#)

[**Lunar Calendar for 1999 prepared by G3SEK**](#)

[**Netnotes by K1RQG**](#)

[**Leave Contest Info or Comments to Allen Here**](#)

This information was obtained from: [Scott, KD4LT](#)

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[**Rein, W6/PA0ZN**](#)

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